

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD
FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

1984 RESEARCH VESSEL PROGRAMME

REPORT: RV CLIONE: CRUISE 11

(Provisional: not to be quoted without prior reference to the author)

STAFF: D J Symonds
Mrs W A Dawson
Mrs M J Boon
D W Palmer
J M Elson
J W Read (13-16 September)
P Connolly, Irish Observer (16-25 September)
D B Bennett (25 September - 3 October)

DURATION: Left Lowestoft 0900h 13 September 1984
Arrived Lowestoft 0335h 3 October 1984
(All times are Greenwich Mean Time)

LOCALITY: Irish Sea, Bristol Channel, English Channel

AIMS:

1. To carry out the annual survey of 0- and 1-group gadoids in the Irish Sea.
2. To repeat the standard trawl hauls on the Smalls Nephrops grounds.
3. To deploy a current meter rig off the Owers.
4. To pick up, service and relay a current meter rig in the North Channel.
5. To retrieve a current meter rig in Start Bay.

NARRATIVE:

On passage to the Irish Sea, a current meter was laid off the Owers at 0600h 14 September. The last known position of the North Channel current meter rig was reached by the morning of the 16th but, despite 5 hours searching, the current meters could not be located and a complete new rig was laid. J Read was put ashore and P Connolly embarked by Belfast Pilot Boat at 1600h on the same day.

The first station of the pre-recruit survey was carried out off Arklow at 0640h 17 September and trawling continued in St George's Channel during the next two days. Taking advantage of the fine weather, the Celtic Deeps survey was completed on the 19th. The Irish Sea survey recommenced the following day and continued uninterrupted, in spite of strong westerly to northerly winds, until CLIONE docked at Douglas, Isle of Man, at 1530h, 24 September to replenish water and change staff.

Sailing from Douglas at 0600h 26 September, the survey stations were all completed in fine weather by 1146h on the 29th and trawling continued for the rest of the day SW of the chickens to collect live Nephrops for transport to the Laboratory. CLIONE set sail for Lowestoft at 1830h, retrieving the current meter rigs in Start Bay and at the Owers on the way.

RESULTS:

Aim 1 The 32 standard trawl hauls in the pre-recruit gadoid survey, stratified by area and depth, were successfully completed. An additional 12 hauls were made in the northern Irish Sea and Cardigan Bay to give more detailed information on the distribution of small fish. Catches were generally light particularly on the western side of the Irish Sea and, as in previous years, the catches were dominated by poor cod. Good catches of roker were made in Muddy Hollow of Tremadoc Bay (Station 50) and in the inshore station of Caernarvon Bay (Station 51). Small scad were fairly common in the southern part of the survey area and unusually large catches of small mackerel (mainly 2 group) were made in Cardigan Bay (Stations 19-22). Also of note were the better than average catches of 2 and 3 group sole in Liverpool Bay (up to 133 fish per 1 hour tow in Station 45).

Provisional mean numbers per 1 hours fishing from the 32 stations of the standard survey are given in the following table:

| <u>Depth</u> | <u>Sector</u> | <u>Cod</u> | | <u>Whiting</u> | |
|-----------------|---------------|----------------|----------------|----------------|----------------|
| | | <u>0-group</u> | <u>1-group</u> | <u>0-group</u> | <u>1-group</u> |
| 0-50m | NW | 0.0 | 1.8 | 286.2 | 28.0 |
| | NE | 7.2 | 5.0 | 3.2 | 44.8 |
| | SW | 0.2 | 0.2 | 28.2 | 2.2 |
| | SE | 0.0 | 0.0 | 96.8 | 39.0 |
| 50+m | NW | 0.0 | 0.2 | 228.0 | 223.5 |
| | NE | 0.2 | 0.0 | 298.5 | 22.5 |
| | SW | 0.0 | 1.2 | 0.0 | 0.0 |
| | SE | 0.0 | 0.2 | 1.5 | 1.8 |
| Irish Sea total | | 1.0 | 1.1 | 117.8 | 45.2 |

These results indicate that the 1984 year class of cod is probably poor whereas that of whiting is about average. They also confirm the results of last year's survey that the 1983 year class of cod is poor and of whiting is good.

A total of 914 pairs of otoliths from 11 species and 56 spines from spurdogs were collected in connection with the pre-recruit assessment, biological investigations and market sampling programme. Samples of fish were deep-frozen for the laboratory's fish identification course, AEP1 and AEP2 (Burnham). Dragonets were collected for Dr A Brand (Port Erin) and live Nephrops, anglerfish (Lophius) and cod brought back to the laboratory.

For the first time on the CLIONE the groundfish survey data were fed into the computer on board. A problem with the software arose towards the end of the cruise which resulted in the last 5 trawl stations not being entered. However it would not have been possible to access the data as the programs to do this are not available for this system. This job should be given high priority so that they can be fully tested before the next groundfish survey is due.

Aim 2 The six standard hauls in the Celtic Deepes gave small catches, the main species being blue whiting and Norway pout. Only small numbers of Nephrops and few small hake were taken. The stomach contents of 9 species were examined; crustaceans were the main prey.

Aim 3 The current rig off the Owers was laid at the beginning and recovered at the end of the cruise.

Aim 4 The toroid buoy of the North Channel current meter rig was known to be missing before sailing. Attempts to find the rig acoustically failed. Grapnelling located the groundline but this was found to be broken and only the toroid weight was retrieved. A final attempt to recover the current meters by acoustic release and subsequent visual sighting of the sub-surface buoy were unsuccessful. A complete new rig was laid.

Aim 5 The current meter rig in Start Bay was recovered.

D J Symonds
3 October 1984

SEEN IN DRAFT: G Sinclair (Master
R C Newrick (Fishing Skipper)

INITIALLED: DJG

DISTRIBUTION:

Basic list +
D J Symonds
Mrs W A Dawson
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